Coventry Law Journal

2000

The difficulty in relying on DNA evidence alone

Beverley Steventon

Subject: Criminal evidence

Keywords: DNA evidence; Robbery

Cases: R. v Lashley (Ronald) Unreported February 8, 2000 (CA (Crim Div))

R. v Smith (Jesse) Unreported February 8, 2000 (CA (Crim Div))

*Cov. L.J. 41 Introduction

The development of DNA profiling as a highly discriminatory forensic technique has highlighted some of the difficulties caused by the presentation of statistical evidence to the jury and the difficulty the jury may have in their evaluation of this evidence. In the mid 1990's these issues came before the Court of Appeal and in *Denis Adams (No. 1)* (1996) 2 Cr App R 467, Rose LJ, in the course of giving judgement, said at page 470, that:

“There is, however, nothing inherent in the nature of DNA evidence which makes it inadmissible in itself or which justifies a special, unique rule, that evidence falling into such a category cannot found a conviction in the absence of other evidence.”

However two recent cases illustrate the difficulty the prosecution will face in relying on DNA evidence alone and provide an indication of the evidence that will be required to found a case to answer.

R v Lashley (Ronald) LTL 25th February 2000

The Facts

The appellant was convicted of robbery and of possessing an imitation firearm with intent to endanger life and was sentenced to six years' imprisonment on each count concurrent. The robbery had taken place at a sub-post office on August 17th 1996. It was clearly a planned robbery and it was carried out by three men wearing balaclavas. During the course of the robbery the sub-postmaster was manacled to the safe on the floor. The appellant was not arrested until July 1998 and the only evidence against him was DNA evidence obtained from a half smoked cigarette found behind the counter of the Post Office. The saliva on the cigarette end was analysed and found to match a sample obtained from the appellant. At trial evidence was given that the DNA profile obtained from the saliva on the cigarette end matched the appellant and statistically would be likely to match seven to ten other males in the United Kingdom. There was no evidence to show that the appellant was in the relevant area at the time when the offence was committed nor any evidence to indicate knowledge of, or participation in, the offence. The appellant declined to answer questions during interview. A submission of no case to answer was unsuccessful and the appellant then elected not to testify.

*Cov. L.J. 42 The decision of the Court of Appeal

The issue before the Court of Appeal was whether, relying on the DNA evidence alone, the prosecution had established a case to answer. The Court referred to the decision in *Doheny and Adams* (1997) 1 Cr App R 369 where Phillips LJ, at page 373, set out the significance of DNA evidence. He said

“The significance of the DNA evidence will depend critically upon what else is known about the suspect. If he has a convincing alibi at the other end of England at the time of the crime, it will appear highly improbable that he can have been responsible for the crime, despite his matching DNA profile. If, however, he was near the scene of the crime when it was committed, or has been identified as a suspect because of other evidence which suggests that he may have been responsible for the crime, the DNA evidence becomes very

significant. The possibility that two of the 26 men in the United Kingdom with the matching DNA should have been in the vicinity of the crime will seem almost incredible and a comparatively slight nexus between the defendant and the crime, independent of the DNA, is likely to suffice to present an overall picture to the jury that satisfies them of the defendant's guilt. The reality is that, provided there is no reason to doubt either the matching data or the statistical conclusion based upon it, the random occurrence ratio deduced from the DNA evidence, when combined with sufficient additional evidence to give it significance, is highly probative. As the art of analysis progresses, it is likely to become more so, and the stage may be reached when a match will become so comprehensive that it will be possible to construct a DNA profile that is unique and which proves the guilt of the defendant without other evidence. So far as we are aware that stage has not yet been reached."

The Crown drew the Court's attention to the comment by Rose LJ in *Denis Adams* (cited above) concerning the nature of DNA evidence. The Court felt that this must be read alongside the passage from Phillips LJ in *Doheny and Adams* and that in this case, making an allowance for those males too old or too young to commit the offence there were perhaps five or six males in the United Kingdom who could have committed the offence. The prosecution in this case was relying on the DNA evidence alone and in these circumstances how could the jury be sure which individual had committed the offence? Accordingly the appeal was allowed, the defence submission of no case to answer should have succeeded.

R v Smith (Jesse) LTL 28th February 2000

The Facts

The appellant was convicted of robbery and was sentenced to seven years and six months' imprisonment. On 13 November, 1997 three men had entered a Post Office wearing balaclavas and carrying three pieces of wood, staff were threatened and a customer knocked to the floor. Nearly three and a half thousand pounds was taken and the ***Cov. L.J. 43*** three men left in a stolen vehicle driven by a fourth person. They later switched to a second stolen vehicle which crashed into a tree and was abandoned. There was blood in front of the driver's seat and in the area of the driver's door and the stolen property was recovered from the vehicle and the roadside. The appellant was arrested nearly three months later near the scene. He declined to answer questions in interview but agreed to provide a blood sample for analysis. The DNA profile obtained from the sample matched that obtained from the blood found in the vehicle and at trial evidence was given to the effect that the chance of an individual chosen at random matching the sample from the scene of the crime was 1 in 1.27 million. It was put to the jury that statistically 43 other males in the United Kingdom could match the profile obtained. At the end of the prosecution case the defence made a submission of no case to answer. The basis of the submission was that the appellant was one of a group of individuals who might have been the driver of the vehicle. The judge rejected the defence submission and ruled that there was a case to answer. The appellant gave evidence that he was of gypsy origin and from a large family, the jury being invited to draw the inference that other close relatives may have matched the crime scene sample had their blood been analysed.

The decision of the Court of Appeal

The issue before the Court concerned the fact that, on the basis of the DNA evidence, the appellant was simply one of a group of individuals who could have been the driver of the vehicle. The Court felt that some support for the appellant's submission could be found in the passage, quoted above, from Phillips LJ in *Doheny and Adams.* In addition they referred to a further passage from Phillips LJ, at page 370, relating to advice in directing the jury in relation to such evidence. He said:

"Members of the jury, if you accept the scientific evidence called by the Crown this indicates that there are probably four or five white males in the United Kingdom from whom that semen stain could have come. The defendant is one of them. If that is the position, the decision you have to reach, on all the evidence, is whether you are sure that it was the

defendant who left the stain or whether it is possible that it was one of the other small group of men who share the same DNA characteristics."

The Court felt that the present case was not a case based solely on DNA evidence, there was evidence that the appellant had been arrested a short distance from the scene of the crime. This geographical proximity to the scene, together with the fact that the potential number of individuals who might match the sample from the scene of the crime needed to be reduced to account for those too old and too young to commit the offence, meant that there was a case to answer. It was for the jury to evaluate all of the evidence including the evidence given by the appellant and to determine whether they were satisfied beyond reasonable doubt that the appellant had committed the offence. The jury came to the conclusion that they were so satisfied and the Court considered that this was a conclusion at which they were entitled to arrive and dismissed the appeal.

*Cov. L.J. 44 Commentary

DNA evidence, its statistical interpretation and the inferences to be drawn from it have caused difficulties for the Court of Appeal on a number of occasions. These difficulties have resulted partly because this type of evidence is highly discriminatory and the statistics presented to the Court are very large. Frequently there will be only a one in a million, or one in several million, chance that an individual chosen at random would match a sample found at the scene of the crime. Where the evidence is so powerful when should such evidence alone found a conviction and what guidance should be given to the jury to assist them in attributing the appropriate weight to the evidence? These issues were considered by the Court of Appeal in *Denis Adams (No 1)* (1996) 2 Cr App R 467, *Denis Adams (No 2)* (1998) 1 Cr App R 377 and *Doheny and Adams* (1997) 1 Cr App R 369. The above cases of *Lashley* and *Smith* illustrate some of the difficulties raised by DNA evidence and the application of the earlier case law.

The case of *Lashley* can be interpreted as supporting the statement by Rose LJ in *Denis Adams (No 1)* quoted at the beginning of this note. There is nothing inherent in the nature of DNA evidence which justifies a special rule that a finding of guilt cannot be based on this evidence alone. In *Lashley* the Court of Appeal simply applied the normal laws of evidence and on the facts of this case there was simply not a case to answer. The statistics related to the DNA evidence did not justify a finding of a case to answer in the absence of any other evidence. The question that remains is what statistics could justify a finding of guilt on DNA evidence alone?

On 25 February, 2000 the Police Review contained a reference, at page 9, to the unreported Crown Court case of *Maher.* It is reported that the revised DNA profiling technique of SGM Plus showed that the chance of an individual chosen at random matching the DNA profile from the scene of the crime was one in a billion. Maher's profile matched that from the scene of the crime. The DNA evidence was the only evidence against Maher who was convicted of rape. On 10 April, 1995 the amendments to the Police and Criminal Evidence Act 1984 inserted by the Criminal Justice and Public Order Act 1994 came into force. As a consequence of these amendments a significant DNA database has been built up. The amended legislation provides for the retention on a database, in searchable form, of the DNA profiles from persons convicted of a recordable offence. Samples from the scene of an unsolved crime can be run against the database to identify potential suspects. The suspect may then be arrested and a sample taken from that individual and checked against the sample from the scene of the crime. In such circumstances the police will interview the suspect and investigate his links with the offence. If no further evidence comes to light the police must then decide whether or not to charge the individual based on the DNA evidence alone. As the database expands it is increasingly likely that individuals will be identified in this way, through the database, and that the DNA evidence may be the only evidence against them.

Do the advances in DNA profiling mean that we have now reached the stage envisaged by Phillips LJ when he said "... the stage may be reached when a match will become so comprehensive that it will be possible to construct a profile that is unique and which ***Cov. L.J. 45** proves the guilt of the defendant without other evidence. So far as we are aware

that stage has not yet been reached." The issue of when DNA evidence alone will be strong enough to found a case to answer is crucial. It is far from resolved and likely to return to the Court of Appeal in the near future.

In contrast the case of *Smith* neatly illustrates a case based substantially but not solely on DNA evidence alone. As stated by Phillips LJ in *Doheny and Adams* , where the defendant is one of a small number of individuals who might have committed a crime, a comparatively slight nexus between the defendant and the crime, independent of the DNA, is likely to present an overall picture to the jury that satisfies them of the defendant's guilt. In the case of *Smith* he was arrested close to the scene of the crime, albeit three months later, providing geographical proximity to the crime.

Beverley Steventon

Senior Lecturer in Law

Coventry University

Cov. L.J. 2000, 5(1), 41-45